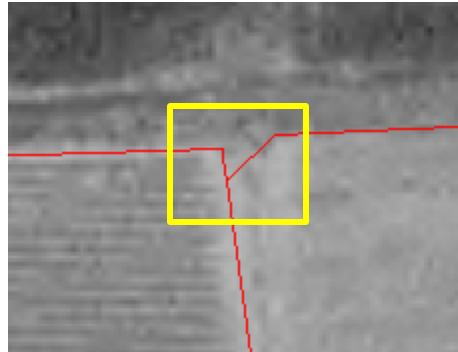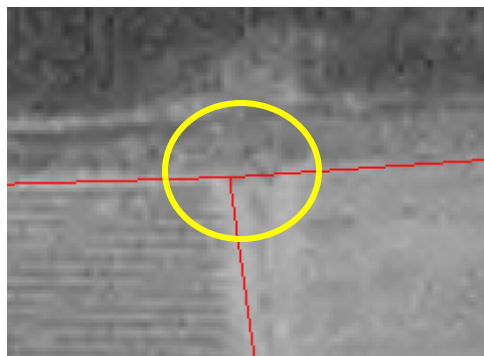# "Snapping" in ArcView

Adding adjacent polygons in ArcView using the CLU Maintenance Tool can be troublesome when snapping is not being used. It is common to create a polygon that looks like this when it is added to an existing polygon:

With the use of the snapping environment in ArcView, you can improve how new features meet and align as you create them. When the snapping environment is set, ArcView moves the vertices or line segments of the new features you add to align with the vertices or line segments of other features that are within a specified distance, the "snap tolerance" (as seen in the following graphic).
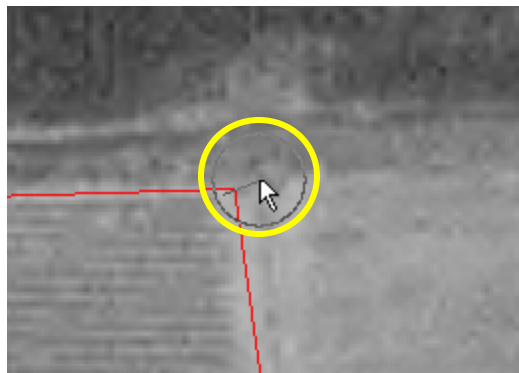
This way, all line features coming together at an intersection will share the same endpoint, and there will be no overshoots or undershoots, and for polygon themes, there will be no gaps or overlap between adjacent polygon features.

There are two types of snapping: General and Interactive.

General snapping

If you want your features to be automatically snapped to other features within the specified tolerance, set ArcView's general snapping environment. General snapping is feature-to-feature snapping that gets applied as soon as you have added a new feature.
To set the general snapping environment by typing in a tolerance:

1)   Click on the name of the theme you are editing in the view's Table of Contents to make it active.
2)   Click the Theme Properties button.
3)   In the dialog that appears, click the Editing icon to display the theme's editing properties. In the Snapping panel, click the General check box to turn this snapping on. Type a tolerance value into the tolerance field that appears (in this case, 10 feet). Press OK.
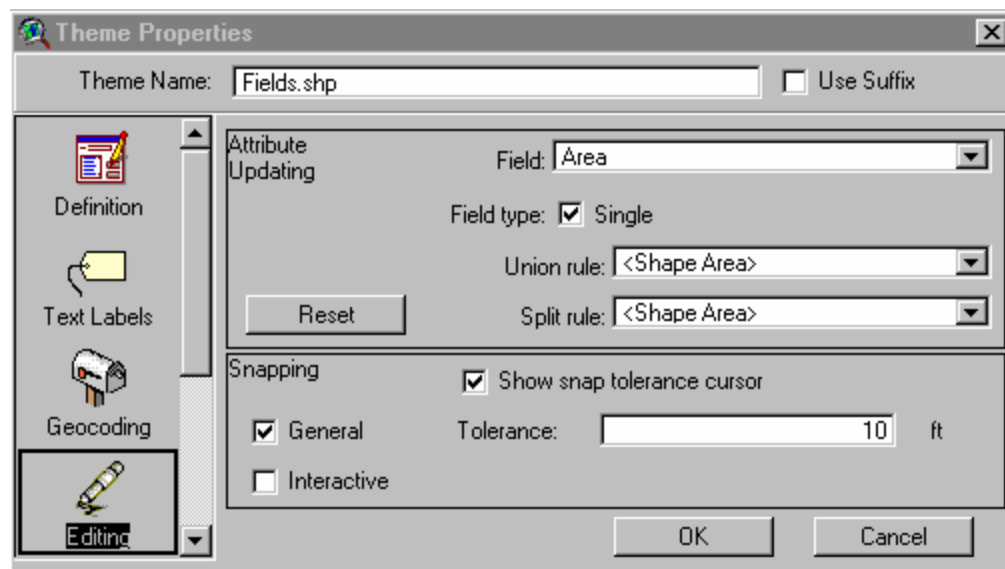
To set the general snapping environment with the mouse:

1)   In the view, hold down the right mouse button to display the popup menu, and choose Enable General Snapping from this menu.
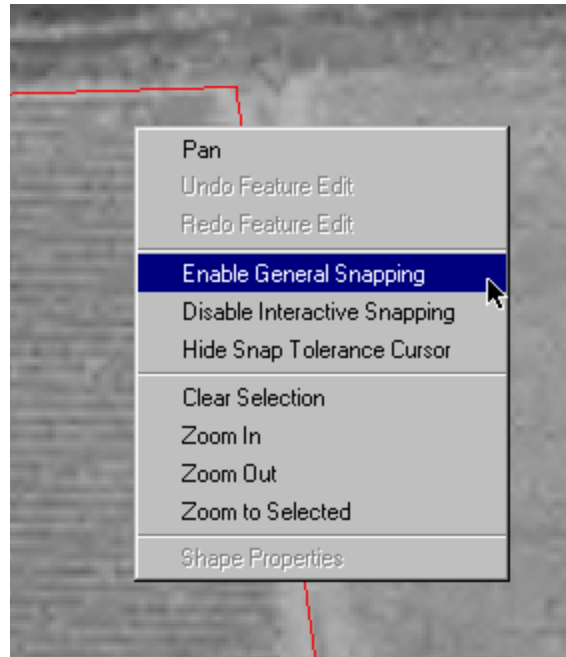
2)   Click the Snap tool palette and in the list of tools that pops down, click the General Snap tool. In the view, click and drag out a circle to represent the tolerance distance. The radius of the circle is displayed in the status bar. This radius value becomes the general snap tolerance.
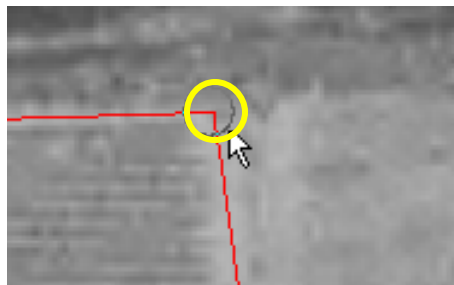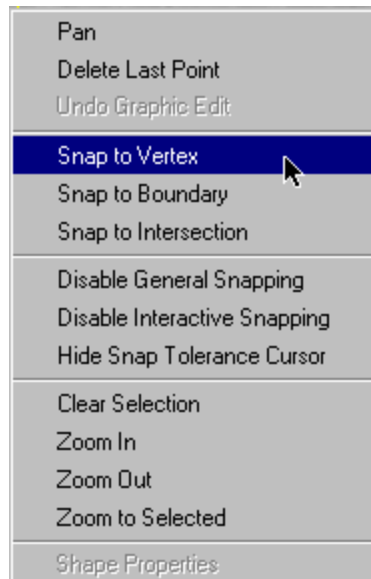
Interactive snapping

For better control over snapping features, use interactive snapping. With interactive snapping, you can apply different snapping rules on a per vertex basis while you are adding a new line or polygon feature. In this way, you will be able to control how each vertex along the line or polygon boundary you are adding is snapped to existing lines or polygons in the theme. You can choose one of the following snap rules from the popup menu while you are adding the feature:

Snap to Vertex: snaps the next vertex to the nearest vertex in an existing line or polygon.
Snap to Boundary: snaps the next vertex to the nearest line segment in an existing line or polygon boundary.
Snap to Intersection: snaps the next vertex to the nearest node common to two or more lines or polygons.
Snap to Endpoint: snaps the next vertex to the nearest endpoint of an existing line (available for line themes only).

To set the interactive snapping environment by typing in a tolerance:

1)   Make the theme you are editing active, if it isn't already.
2)   Click the Theme Properties button.
3)   In the dialog that appears, click the Editing icon to display the theme's editing properties. In the Snapping panel, click the "Interactive" check box to turn this snapping on. Type a tolerance value into the tolerance field that appears. Press OK.

To set the interactive snapping environment with the mouse:

1)   In the view, hold down the right mouse button to display the popup menu, and choose Enable Interactive Snapping from this menu.
2)   Click the Snap tool palette and in the list of tools that pops down, click the Interactive Snap tool. In the view, click and drag out a circle to represent the tolerance distance. The

radius of the circle is displayed in the status bar. This radius value becomes the interactive snap tolerance.

Snap tolerance cursor

When either general or interactive snapping is turned on, you have the option of displaying a circle representing the snap tolerance with the cursor as you create lines, polygons, or edit vertices. This is known as the snap tolerance cursor. If general snapping is turned on, the circle represents the general snap tolerance. If interactive snapping is also turned on, the circle will change to the interactive snap tolerance when you chose an interactive snap rule. By default, the snap tolerance cursor is turned on when snapping is turned on.

To turn the snap tolerance cursor off:

1)   Click on the name of the theme you are editing in the view's Table of Contents to make it active.
2)   Click the Theme Properties button.
3)   In the dialog that appears, click the Editing icon to display the theme's editing properties. In the Snapping panel, click the Show snap tolerance cursor check box to turn this off. (Note: this checkbox is only visible when general and/or interactive snapping is turned on.)

To turn the snap tolerance cursor off with the mouse:

1)   In the view, hold down the right mouse button to display the popup menu, and choose Hide Snap Tolerance Cursor.